

State of Utah

Department of Natural Resources

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Division of Oil, Gas & Mining

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Governor

GAYLE F. McKEACHNIE
Lieutenant Governor



December 16, 2004

Dennis Ware, Controller Castle Gate Holding Company P.O. Box 30 Helper, Utah 84526-0030

Re:

<u>Phase I Bond Release – Sowbelly Substation Area, Castle Gate Holding Company, Castle Gate Mine, C/007/0004, Task ID #2038, Outgoing File</u>

Dear Mr. Ware:

The above-referenced amendment has been reviewed. There are deficiencies that must be adequately addressed prior to approval. A copy of our Technical Analysis is enclosed for your information. In order for us to continue to process your application, please respond to these deficiencies by March 1, 2005.

If you have any questions, please call me at (801) 538-5268 or Wayne Western at (801) 538-5263.

Sincerely,

Pamela Grubaugh-Litt(g

Permit Supervisor

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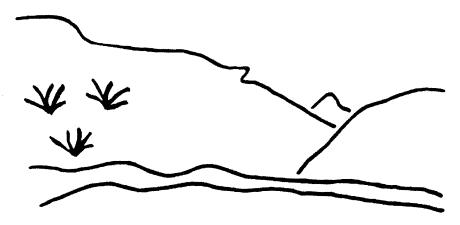
Enclosure

cc: Price Field Office

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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Castle Gate Mine
Phase I Bond Release Sowbelly Substation Area
C/007/0004, Task #2038
Technical Analysis
December 15, 2004

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TECHNICAL ANALYSIS

The Division ensures that coal mining and reclamation operations in the State of Utah are consistent with the Coal Mining Reclamation Act of 1979 (Utah Code Annotated 40-10) and the Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87). The Utah R645 Coal Mining Rules are the procedures to implement the Act. The Division reviews each permit or application for permit change, renewal, transfer, assignment, or sale of permit right for conformance to the R645-Coal Mining Rules. The Applicant/Permittee must comply with all the minimum regulatory requirements as established by the R645 Coal Mining Rules.

The regulatory requirements for obtaining a Utah Coal Mining Permit are included in the section headings of the Technical Analysis (TA) for reference. A complete and current copy of the coal rules can be found at http://ogm.utah.gov

The Division writes a TA as part of the review process. The TA is organized into section headings following the organization of the R645-Coal Mining Rules. The Division analyzes each section and writes findings to indicate whether the application complies with the requirements of that section of the R645-Coal Mining Rules.

When review of an application results in findings of noncompliance with the R645-Coal Mining Rules, the Division discusses the deficiencies in the analysis sections and cites regulatory references for the deficiencies in the findings sections of the Draft TA. The regulatory references cited describe the minimum requirements for meeting the R645-Coal Mining Rules.

SUMMARY OF DEFICIENCIES

The Technical analysis of the proposed permit changes cannot be completed at this time. Additional information is requested of the permittee to address deficiencies in the proposal. A summary of deficiencies is provided below. Additional comments and concerns may also be found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this review, any deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the division, result in denial of the proposed permit changes, or may result in other executive or enforcement action and deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

R645-301-121.200; Show in Table 3.2-9, Reclamation As-Built Hydrology Culvert Summary, that culverts SBRC-2 and SBRC-3 were removed from the reclamation design by extending drainages SBRD-5 and SBRD-3, respectively; • Consistently state the date of reclamation for the substation and access road in Section 3.2-5(4), Section 3.2-6, and Ex. 3.2-13; • Using the symbols in the legend, illustrate the sediment control measures used in the substation area on Map 3.2-13 • Clearly state in Section 3.2-5(4) that culvert SBRC-3 was removed during reclamation and construction of reclamation channel SBRD-3
R645-301-542.200, As-Built Reclamation Topography and Cross-section Location Map, Exhibit 3.2-13 must have a notation indicating the location of all cross sections identified on the map.
R645-301-761; The Permittee needs to include the riprap and channel certification statements fo drainages SBRD-3 and SBR-5 in Appendices 3.2C and 3.2H
R645-301-761; The Permittee needs to provide the as-built cross sections and profiles for drainages SBRD-3 and SBRD-5 in Exhibits 3.2-15 and 3.2-16, respectively, as referenced in Section 3.2

SUMMARY OF DEFICIENCIES

Phase II bond release for all areas at the Sowbelly site except the substation area were approved on February 21, 2003. On September 14, 2004, the Division received requests for Phase I bond release for the 1.84-acre substation site. The Permittee reclaimed the Sowbelly substation site in the fall of 2002.

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-333, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

Although culverts SBRC-2 and SBRC-3 were eliminated from the construction of drainages SBRD-5 and SBRD-3, respectively, the culverts are still listed in the text and in Table 3.2-5, Reclamation Hydrology Culvert Design Summary. The Permittee gave the reason for eliminating the culverts in the addendum to Appendix 3.2G, and in Section 3.2-5(4). In order to eliminate any confusion, the Permittee also needs to indicate in Table 3.2-9, Reclamation AsBuilt Hydrology Culvert Summary, that culverts SBRC-2 and SBRC-3 were removed from the reclamation design by extending the drainages.

The Permittee indicated in Section 3.2-5(4) and Section 3.2-6 that they reclaimed the substation site in 2003, but Exhibit. 3.2-13 shows the substation was reclaimed in 2002. The Permittee must list the correct date when reclamation was done on through out the MRP.

Map 3.2-13 must indicate the sediment control measures used in the substation area using the symbols in the legend

Section 3.2-5(4) of the narrative does not clearly indicate that the Permittee removed culvert SBRC-3 during reclamation and construction of reclamation channel SBRD-3. The Permittee must clearly state that the culverts were removed in the MRP.

Findings:

The information provided does not meet the minimum requirements of the reclamation regulations. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-121.200; Show in Table 3.2-9, Reclamation As-Built Hydrology Culvert Summary, that culverts SBRC-2 and SBRC-3 were removed from the reclamation design by extending drainages SBRD-5 and SBRD-3, respectively; • Consistently state the date of reclamation for the substation and access road in Section 3.2-5(4), Section 3.2-6, and Ex. 3.2-13; • Using the symbols in the legend, illustrate the sediment control measures used in the substation area on Map 3.2-13 • Clearly state in Section 3.2-5(4) that culvert SBRC-3 was removed during reclamation and construction of reclamation channel SBRD-3.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-553, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

The requirements to achieve approximate original contour restoration are a combination of performance standards for backfilling and grading, hydrology, postmining land use and revegetation. The performance standards include:

- Minimization off-site impacts.
- The final surface configuration closely resembles the general surface configuration of the land prior to mining.
- The topsoil/growth media are adequate to support the vegetation requirements.
- Erosion is minimized.
- The land is able to support the approved postmining land use.

The intent of the approximate original contour regulations is not to restore a site to the approximate premining elevation. Rather the intention of the regulations is to ensure that the reclaimed site has slope lengths and gradients that are within acceptable limits.

The main criterion that the Division uses to determine if the Permittee achieved AOC is whether the postmining topography, excluding elevation, closely resembles its premining configuration. Regulatory requirements that must be achieved include:

- Eliminate all highwalls (none at the substation).
- Eliminate all spoil piles (none at the substation).
- Eliminate all depressions with the exception of small depressions needed to retain moisture, minimize erosion, create and enhance wildlife habitat or assist revegetation.
- Minimize erosion and water pollution both on and off site.

• Support the postmining land use.

Exhibit 3.2-13 provides reclamation topography and cross-section locations. The Permittee met the minimum requirements for achieving AOC because:

- There are no depressions at the site except for small depressions (pocks). The pocks are part of a standard surface roughening methods used to control erosion and water pollution.
- The slopes were reclaimed according to the approved reclamation plan see Exhibit 3.3-4A. The plan minimizes erosion and water pollution.
- The Division expects that the reclaimed site will support the postmining land use of grazing and wildlife habitat because the slopes blend with the surrounding area and the area was seeded (Appendix 1 of the bond release application).

Findings:

The information provided in the bond release package meets the minimum requirements of the approximate original contour requirements.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

The Permittee meet the general backfilling and grading requirements because:

- The area was reclaimed to the approximate original contour requirements. See the Approximate Original Contour section of the TA for details.
- The reclaimed slopes have a safety factor of 1.3 or greater and do not exceed the angle of repose. See Exhibit 3.3-23 for as-built certifications.
- The Permittee reclaimed the site using surface roughening techniques (pocking). Pocking is an effective means to control erosion and water pollution.

Previously Mined Areas

The R645 Rules allow the Division to enforce different standards to pre-SMCRA disturbed sites if highwalls or spoil piles are present. Since there are no highwalls or spoil piles associated with the substation area those rules do no apply for that area.

Pre-SMCRA highwalls did exist in the Sowbelly site and the Division addressed those issues during the general Phase I bond release process.

Findings:

The information provided in the bond release package meets the minimum requirements of the backfilling and grading requirements.

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Analysis:

There are no mine openings at the substation area.

Findings:

The information provided in the bond release package meets the minimum requirements of the mine openings requirements.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

The Permittee did not apply topsoil at the site.

Findings:

The information provided meets the requirements for bond release.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Retention

The approved reclamation plan calls for the retention of the road in Hardscrabble Canyon including the access to the substation.

Findings:

The information provided in the bond release package meets the minimum requirements of the road systems and other transportation facilities requirements.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-725, -301-725, -301-726, -301-726, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-761.

Analysis:

Hydrologic Reclamation Plan

The reclamation as-built calculations, drawings, and cross-sections for drainages SBRD-3 and SBRD-5 are included in an addendum to Appendix 3.2G. The as-built calculations and information provided have been reviewed and appear to be accurate and complete. Furthermore, the cover page of the addendum has been signed and stamped by a registered professional engineer.

However, text in Section 3.2 of the MRP also references riprap and channel certification statements in Appendices 3.2C and 3.2H, respectively. To be consistent with the text, the Permittee needs to include the riprap and channel certification statements for drainages SBRD-3 and SBR-5 in these appendices.

Findings:

The information provided is not consistent with the text reference documenting drainage in the approved reclamation plan. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-761; The Permittee needs to include the riprap and channel certification statements for drainages SBRD-3 and SBR-5 in Appendices 3.2C and 3.2H.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Erosion control for the substation was accomplished by gouging 2 ton/acre noxious weed-free hay into the surface soil; seeding with the mix described in Appendix 1 of the Phase I bond release for the Sowbelly Substation Area; and mulching with 1.5 ton/acre noxious weed-free straw and 500 lbs/ac of hydromulch and tackifier (Section 3.2-5(1)).

Findings:

The information provided in the bond release application meets the bond release regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Affected Area Boundary Maps

There was no change to the affected area boundary.

Bonded Area Map

There was no change to the bonded area.

Reclamation Backfilling And Grading Maps

The Permittee included As-Built Reclamation Topography and Cross-section Location Map, Exhibit 3.2-13 with the bond release package. The Permittee noted the locations of cross sections on Exhibit 3.2-13, but the Division could not find these cross-sections in the plan. The Permittee must state on the map where the cross sections shown on Exhibit 3.2-13 can be found.

Reclamation Facilities Maps

There are no reclamation facilities associated with the substation area.

Final Surface Configuration Maps

As-built profiles and cross sections are included in the submitted amendment to Appendix 3.3O. However, as-built cross sections and profiles for all reclamation channels are referenced in the text as being provided in Exhibits 3.2-15 and 3.2-16. The as-built cross sections and profiles for drainages SBRD-3 and SBRD-5 should also be provided in Exhibits 3.2-15 and 3.2-16, respectively.

Reclamation Surface And Subsurface Manmade Features Maps

Other than the road shown on Exhibit 3.3-19 in the MRP, there are no surface or subsurface manmade features at the substation site.

Certification Requirements.

All appropriate maps were certified.

Findings:

The information provided does not meet the requirements for bond release. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-542.200, As-Built Reclamation Topography and Cross-section Location Map, Exhibit 3.2-13 must have a notation indicating the location of all cross sections identified on the map.

R645-301-761; The Permittee needs to provide the as-built cross sections and profiles for drainages SBRD-3 and SBRD-5 in Exhibits 3.2-15 and 3.2-16, respectively, as referenced in Section 3.2.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

General

The Permittee address the general procedures for bond release as follows:

- The Permittee described the area for which Phase I bond release is being sought as 0.72 acres in SE1/4SW1/4 of Section 3, Township 13 South, Range 9 East, SLB&M, Utah.
- The substation area is shown on Exhibit 3.3-23 in the MRP.
- The Permittee provided as built drawing Exhibit 3.2-13 that shows acreage of disturbed areas in Sowbelly Canyon, and reclamation status of each area
- Exhibit 3.2-13 provides dates of completion for the reclamation work and status of bond release.
- The Permittee included a brief history of the mining and reclamation activities.
- There were no ponds within the substation area. The Permittee used surface roughening techniques, such as pocking for sediment control.
- Table 3.1-2 shows the sites within the Castle Gate Mine, the disturbed acres, the bond held, and the bond release requested.

Determination of Bond Amount

Current bond for Sowbelly is \$233,000 in 2004 dollars. The Permittee requested that the bond amount be reduce \$85,000 for work done at the Sowbelly Substation. After bond release, the bond amount would be \$148,000 in 2004 dollars.

R645-301-830.300 requires that the Division escalate the bond amount. In 2004, the Division escalated the bond by 2.59%. The Division determined that the bond escalated to 2009 dollars would be \$168,000. Therefore, the Division can only grant \$65,000 in bond release.

Findings:

The information provided in the bond release package meets the minimum requirements of the bonding and insurance requirements.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

Information provided is adequate to update the Cumulative Hydrologic Impact Assessment if necessary.

Findings:

The information provided meets the requirements for bond release.

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